

AMENDMENTS TO THE CLAIMS

1-13. (Canceled)

14. (Currently amended) A method of manufacturing a solid-state image pickup device, characterized by comprising:

a step of forming a photoelectric converting portion and collective lens in each pixel of an imaging area,

wherein the collective lens is placed at a position shifted more toward a center of the imaging area than the position of the photoelectric converting portion in a pixel based on a position of each pixel; and

~~as a distance from the center of the imaging area to a pixel thereof increases; and~~

an amount of the shift of the collective lens is defined based on the height from a surface of the photoelectric converting portion of the collective lens and the thickness in the direction of depth of the substrate of the photoelectric converting portion such that an amount of light incident within the photoelectric converting portion can increase.

15. (Previously presented) The method of manufacturing a solid-state image pickup device according to Claim 14, characterized in that a bottom of the photoelectric converting portion is placed at a position shifted from the center part of the imaging area toward the outside with respect to the surface thereof.

16. (Previously presented) The method of manufacturing a solid-state image pickup device according to Claim 15, characterized in that an amount of the shift of the bottom of the photoelectric converting portion is increased as the distance from the center of the imaging area to a pixel thereof increases.

17. (Previously presented) The method of manufacturing a solid-state image pickup device according to Claim 16, characterized in that the photoelectric converting portion is formed by performing ion-implantation into a semiconductor layer multiple times.

18. (Previously presented) The method of manufacturing a solid-state image pickup device according to Claim 17, characterized in that the ion-implantation is performed multiple times at different angles of implantation.

19. (Currently amended) A solid-state image pickup device comprising:

pixels arranged in an imaging area, each of the pixels having a collective lens and a photoelectric converting portion,

wherein the collective lens is placed at a position shifted more toward a center of the imaging area than the position of the photoelectric converting portion in a pixel based on a position of each pixel.

~~wherein a configuration for one of the pixels differs from another of the pixels.~~

20. (Previously presented) The solid-state image pickup device according to Claim 19, wherein, as said configuration, the collective lens for said one of the pixels is shifted more toward a center of said imaging area than the collective lens for said another of the pixels.

21. (Previously presented) The solid-state image pickup device according to Claim 19, wherein, as said configuration, the collective lens for said one of the pixels is closer to the photoelectric converting portion than the photoelectric converting portion for said another of the pixels.

22. (Previously presented) The solid-state image pickup device according to Claim 19, wherein, as said configuration, the photoelectric converting portion for said one of the pixels tilts more from a center part of said imaging area to an outside in a pixel in the screen peripheral part than the photoelectric converting portion for said another of the pixels.

23. (Previously presented) The solid-state image pickup device according to Claim 19, wherein, as said configuration, a depth of the photoelectric converting portion for said one of the pixels is greater than a depth of the photoelectric converting portion for said another of the pixels.

24. (Previously presented) The solid-state image pickup device according to Claim 19, wherein, as said configuration, wires for said one of the pixels are shifted more toward a center of the imaging area wires for said another of the pixels.

25. (Previously presented) The solid-state image pickup device according to Claim 19, wherein the photoelectric converting portion includes multiple impurity regions.